

What is Rocky Mountain spotted fever?

Rocky Mountain spotted fever (RMSF) is an illness caused by infection with the bacterium *Rickettsia rickettsii*. It is spread by the bite of an infected tick. Symptoms range from moderately severe to life-threatening.

Where does Rocky Mountain spotted fever occur?

RMSF has been reported from all areas of the country, but five states (North Carolina, Oklahoma, Arkansas, Tennessee, and Missouri) account for over 60% of cases. There have been no illnesses reported in Hawaii or Vermont. Over 90% of confirmed RMSF cases occur between April and September.

What are the symptoms of Rocky Mountain spotted fever?

Symptoms of RMSF usually begin 2-14 days after the bite of an infected tick. Early symptoms are similar to the flu although frequently more severe. These symptoms may include rash, headache, body aches and fatigue. More serious consequences such as damage to the lungs, heart and kidneys, may occur if the condition is left untreated.

How is Rocky Mountain spotted fever spread?

In the eastern United States, RMSF is primarily transmitted by the bite of the American dog tick, *Dermacentor variabilis*. The brown dog tick, *Rhipicephalus sanguineus* and the Rocky Mountain wood tick, *Dermacentor andersoni*, are responsible for disease transmission in the western part of the United States. Infections usually occur in spring and summer, when ticks are most active.

Rickettsia rickettsii enters the body when an infected tick attaches to the skin to take a blood meal. Because the chance of disease transmission increases the longer the tick stays attached, a prompt removal of ticks can help prevent infection.

What is the treatment for Rocky Mountain spotted fever?

Rocky Mountain spotted fever is treated with antibiotics. Treatment is most effective if antibiotics are given early, within the first 5 days of the symptoms. Lab tests are needed to confirm the diagnosis of Rocky Mountain spotted fever, but treatment may have to be started before lab results are available.

Who is at risk of getting Rocky Mountain spotted fever?

Reports of RMSF have increased during the last decade. The proportion of RMSF cases resulting in death has declined to less than 0.5%.

While anyone can develop Rocky Mountain spotted fever, the disease tends to be most severe in individuals who are older or have compromised immune systems.

How do you prevent Rocky Mountain spotted fever?

The best way to prevent RMSF is to prevent tick bites.

While outdoors:

- Wear long pants and long-sleeved shirts to minimize skin exposure to ticks.
- Tuck your pants into your socks to form a barrier to tick attachment.
- Wear light-colored clothing to help see ticks on your clothing.
- Check for ticks, looking particularly for what may look like nothing more than a new freckle or speck of dirt, and remove ticks promptly.
- Use an effective tick repellent on your skin or on your clothing. There are several repellents that are effective against ticks. For an up-to-date list of EPA registered products, see <http://cfpub.epa.gov/opprpref/insect/>. Repellents should not be used on infants under 2 months of age. Read the label carefully and use according to the recommendations.
- Use permethrin on clothing you wear outside. Permethrin is an insect repellent that is very effective in preventing tick bites.

After you come inside:

- Check your or your child's body for ticks, and remove them promptly. Pay special attention to the head, armpits, and groin area.
- Examine clothing and gear for ticks. Placing your clothes in a hot dryer for 60 minutes will kill any ticks that may be clinging to the fabric.
- Check your pets for ticks as well. Consult your veterinarian for advice on choosing effective tick repellents for your pets.

How do you remove ticks?

Try to remove the tick as soon as you discover it because prompt removal can prevent transmission of tick-borne diseases.

To safely remove ticks:

1. Use fine-tipped tweezers and firmly grasp the tick close to the skin. Avoid touching the tick with your bare hands
2. With a steady motion, pull straight up until all parts of the tick are removed. Do not twist or jerk the tick. Do not be alarmed if the tick's mouthparts remain in the skin. Once the mouthparts are removed from the rest of the tick, it can no longer transmit disease-causing bacteria.

DO NOT use petroleum jelly, a hot match, nail polish, or other products to remove a tick. These methods are ineffective.

Thoroughly wash your hands and the bite area

After removing the tick, wash your hands with soap and water or use an alcohol-based hand sanitizer if soap and water are not available. Clean the tick bite with soap and water or use an antiseptic such as iodine scrub or rubbing alcohol.